# THE PLOUGH BOY.

## AND JOURNAL OF THE BOARD OF AGRICULTURE.

BY S. SOUTHWICK.

"He that observeth the wind shall not sow; and he that regardeth the clouds shall not reap."—BUT—"He that tilleth his land shall have plenty of bread."—*Ecclesiastes*

Vol. III. *ALBANY: SATURDAY, JANUARY 26, 1822.* No. 35.


## SUMMARY OF THE PROCEEDINGS OF AGRICULTURAL SOCIETIES.

*Schoharie County.*

On the 13th and 14th Nov. old Schoharie held its agricultural anniversary, at the village of Schoharie. The weather was bad—they had no right to expect better, at that advanced season—they will doubtless learn wisdom by experience—the Observer says:—

"The badness of the travelling and unfavourable state of the weather, prevented many people from driving their stock to the pens; and consequently our exhibition on that subject was but indifferent. It was a subject of gratification, however, to find that there were more sheep, and with better fleeces than had at any time heretofore been exhibited. On the subject of domestic manufactures, the display made was flattering. The articles produced exceeded both in number and quality all former exhibitions."

We regret their silence as to reports of committees; above all, we should have been gratified to have exhibited to the world, the effect of their experiments, by deep ploughing on their exhausted flats, of which we have heard the most favourable accounts. Of all the counties in this state, who have a right to calculate on the magic effect of the new system of agriculture, it is Schoharie. It is well known, their extensive flats possess an alluvial soil, from 12 to 14 feet in depth; yet by wheat croping incessantly, for upwards of a century, without science or system, always scratching over the surface, from three to four inches in depth, that their soil, thus abused, had become in a measure inert, barely yielding sufficient to defray the labour expended: besides, wild grass and noxious weeds, had become predominant. How could it be otherwise, with such a wretched system of husbandry? It was evident, therefore, by trench ploughing, that is, running the plough twice in the same furrow, and casting the top surface, of worn out soil, and all its foul seeds, to the bottom of the trench, and throwing up a new soil, on which the sun had never shed its rays, that it would give them a virgin soil, as vigorous as that enjoyed by their ancestors. Such a soil, with a judicious application of salt, and rotations of crops, would insure to them its prolific virtues, in perpetuity.

We are gratified to notice, their premiums were very respectable, viz:—

Ten on agriculture—4 on ploughing match—1 best cultivator—16 on stock——29 on household manufacture. Note—The plough boys were all dressed in rifle frocks—sashes round their waists, and wreaths of straw round their hats. All the household premiums were given *exclusively* to females. They concluded by making choice of their officers, and respective committees, for the insuing year.

*Tompkins County.*

This snug county, held their third agricultural exhibition, the 13th and 14th Nov. at the village of Ithaca; the American Journal complains bitterly of the bad weather, and its effects on their exhibition. We are at a loss to imagine, what evil star has induced several of these societies to pass over the pleasant season, with which our country is peculiarly blessed in September and October, and run into the very worst season of the year.

The Journal says:—"The incessant rains for the week previous had rendered the roads almost impassable. Consequently, fewer persons attended than would otherwise have done, and fewer specimens of stock, products and manufactures were exhibited. An increasing interest, however, was manifested, and some useful experience gained for the future management of the Institution.

"On Tuesday, agreeably to arrangement, the several committees were chosen, and proceeded to examine the articles exhibited for premiums. On Wednesday, at the hour appointed, a procession was formed at the Hotel, and proceeded to the Methodist Chapel, where an able and appropriate address was delivered by Wm. R. Fitch, Esq. of Lansing; after prayer, and other appropriate exercises, the President announced the following premiums."

Jonathan Owen, received a premium of elegant silver plate, for the best farm in the county; the like premium was awarded in each of the towns. Other premiums were also awarded on agricultural products, stock, and household manufactures; the latter exclusively to females; among which, 4 were for superior leghorn hats. It is a consoling fact, that the ladies every where exhibit more spirit and animation, than men: it is therefore pretty evident, they will turn the tables upon the Vermont gallantry, by loudly vociferating—*help these men.*

*Seneca County.*

This county held their agricultural Fair at Ovid village, the 20th November. The Ovid Gazette says:—

"The farmers of the surrounding country began to arrive at an early hour in the morning, with fine specimens of articles of Domestic Manufacture, and beautiful animals, such as horses, horned cattle, sheep and swine, and by noon the village and court-house green were crowded with a rural assemblage truly pleasing to the patriot.

"Elegant and numerous specimens of broadcloth were presented, which did great credit to the owners in point of fineness of wool and skill in spinning—but no credit to our clothiers, who were shamefully deficient in skill and industry. Some pieces of linen were presented of superior fineness and evenness of texture, which would well compare with the best imported. In quality of wool our broadcloth was superior to the imported.

"The animals were generally fine; but in elegant horses, this exhibition probably excelled most others in the state. It excelled also in butter—the premium on which, was contested by many good firkins of that article, for which our wives in this county are justly celebrated.

"The ladies who presented straw bonnets, are deserving much credit; it is to be regretted there were not more presented—only 3 were exhibited. The first premium was awarded on an elegant leghorn, made of the

straw of grass; the second on a pretty dunstable of wheat straw.

"A numerous collection of citizens of both sexes, attended in the various departments of this exhibition."

Thus far all's well, and we sincerely offer our cordial congratulations to the county of Seneca. We are too well acquainted with facts, to hold up this as a county society; we add with some reluctance, it is extremely problematical if they are entitled even to receive a cent of the state bounty. The truth is, it can hardly be admitted to be a sectional society, since it is located at one extremity of a long and narrow county, and got up by a few individuals; whereas, if they are to continue to receive the state bounty, we hope the fair expression of the voice of the whole community, will be heard; and that the present society will be left to consult the local interests of the town of Ovid; or fairly, and honourably consolidate their interests, in a county agricultural society; to hold their annual exhibitions in a central position. We shall then hail the views of this society with singular gratifications, since they would, in that case, represent the entire population of the most interesting, and the most beautiful county in the state, take it all in all.

---

FOR THE PLOUGH BOY.

## Veterinary Medicine.—No. XVI.

### APPETITE.*

Appetite is a disposition for food natural to all animals. This disposition may be interrupted by the existence of diseases which affect the general system; or it may proceed from a disease of the stomach itself. It is well known, that horses are liable to affections of that organ, which bear an affinity to those of the human body, proceed from the same causes, and are often attended with the like effects. In fevers and all inflammatory, diseases, horses are greatly affected in their appetites, and loathe all manner of food. The same will happen in extreme pain, whether inward or outward; the reason of which is to be accounted for, from the mechanism of the stomach, and its sympathy with all the other parts of the body. Those disorders that are more peculiar to the stomach itself, without the participation of any other concomitant distemper, may be reduced to these two, viz. the want of appetite, and *Bulimia*, or voracious appetite.

1. By the want of appetite we do not here suppose a horse to be totally off his stomach, as in fevers, and in cases of excessive pain, but only that he feeds poorly, and is apt to mangle his hay, or leave it in the rack; and this frequently happens to horses that have too much grain given them, which abates their appetite to hay. Some horses are also nice and dainty, but will eat tolerably, when their hay is picked; and free from dust.—There are others that will eat tolerably well, when they stand much in the stable, and do but little business, but lose their stomachs whenever they come to be worked a little more than ordinary; and some of these may be observed to feed little for several days, after one day's hard riding. However, we are not to reckon any horse a poor feeder from the measure of his food, for we see some horses that are small eaters, and yet go through a great deal of fatigue and exercise, without much diminution of their flesh, or any great alteration in their appetite; neither are they more choice than others in what they eat:—therefore these horses can hardly be reckoned bad or poor feeders, but little eaters; and any attempt to make them eat better would perhaps do them more harm than good.

When a horse feeds poorly, however, and does not gather much flesh; when his dung is habitually soft, and of a pale colour; it is an evident sign of a relaxed constitution, wherein the weakness of the stomach and bowels have a very great share. This habitual weakness may either be natural and hereditary, or may be caused by some previous ill management, which relaxes the tone of the stomach, and in the end produces a weak digestion, and consequently the loss of appetite.—Some of these kind of horses have proved of little use, till they have been very near full aged, yet after this they have turned out good serviceable horses, and done a great deal of business. The best method to harden and recover such horses, is to give them much gentle exercise in the open air, especially in dry weather; never to load their stomachs with large feeds, but keep them, as much as possible, to a dry diet, indulging them now and then with a handful of beans [or Indian corn] among their oats. Yet if the horse still grows weak, and requires the help of medicine, a purge or two, containing rhubard and aromatics, should be given to cleanse and invigorate the intestines.

Take succotrine aloes, half an once; rhubarb in powder, two drachms; ginger powdered, one do. make it into a stiff ball, with a sufficient quantity of treacle, [or soap.] This purge will work very gently, bring the horse to a better appetite, and strengthen his digestion. It may be repeated once in about ten days, increasing the quality of aloes, if it does not act sufficiently on the bowels; and the day after the operation of each purge give the following, repeating it for three or four days successively:

Take myrrh, rhubarb, vitriolated kali, [sulphate of potash,] of each half an ounce; pulverise and mix them into a ball with syrup or ginger. Whilst these means are resorted to, continue to give constant exercise in the open air; and this will be the best method to strengthen such horses as are of weak relaxed constitutions, and deficient in appetite. But where such a habit is only contracted by too much feeding, especially on soft scalded diet, which is often the case of young horses, kept up for sale, the best way is to bleed and purge such horses, and, at the same time, to rowel them on the belly; for this sort of feeding easily exposes to be lax that have no natural disposition to it. They may grow suddenly fat by such management, yet it always causes weakness and relaxation in the stomach and bowels, the slimy secretions of which often form a proper nidus for the breeding of worms; all which, however, may be easily remedied, by purging in the first place, and afterwards by proper exercise, and a clean diet.

Those horses that are of a hot fiery disposition, and lose their appetites in consequence of their heat and fretting, cannot easily be assisted by medicine. The only method is to keep them to a cool diet, while they are young, and, in country places, let them run abroad, especially where they have stables and warm ranges, to keep them from the inclemency of the weather in winter; for these sort of horses are always tender, being for the most part extremely thin skinned, and their blood of a thin texture and easily set in motion. For the same reason, the best way in the summer, is to bring them up in the day time, and only let them run abroad in the night, as they suffer more when teased with the flies, than any other, which keeps them continually upon the fret, and hinders them from thriving. When such horses live till they are full aged, their heat of temper often abates, so that they grow more useful; but while they are young, they are more subject to inward abscesses, and imposthumations, than horses of a cooler temperament, and these often kill them suddenly, or bring them into lingering consumptive maladies.

Mr. John Lawrence recommends chalybeate beer, which may be made as follows:—Take steel filings, one pound; cinnamon, and mace, of each two ounces; gentian root, bruised, four ounces; aniseeds, bruised, three ounces; infuse them in one gallon of fine, clear, old, strong beer for a month, stopped close, shaking the vessel often. Then strain the liquor, and give half a pint for a dose, in a pint of cold water, once or twice a day, upon an empty stomach, leaving the horse an hour or two upon his repose. For the expensive articles, cinnamon and mace, some of the cheaper aromatics may occasionally be substituted.

[No remedy is more powerful in restoring appetite to a horse, than asafœtida. The animal appears fond of it. A piece the size of a nutmeg, may be given twice a day. If pounded and mixed with a little soap, it will be rendered more soluble: the best way is to tie it in a rag, and beat it with a hammer or a stone; a house mortar must not be used, on account of the difficulty of freeing it from the smell which the gum leaves: then soften it with a few drops of water, and add a little

---

* Boardman.

soap, so as to make a ball. The Germans in Pennsylvania, fix a piece of asafœtida in the centre of the bottom of the horses water bucket; and when dissolved, renew it. They say their horses are thus kept healthy, and free from worms.—X.]

2. We shall now in the second place treat of the opposite disease in horses, namely, a *bulimia*, or unnatural craving for food.

If voracious or foul feeding cannot accurately be reckoned a disease, yet it may be the cause of various maladies, and is often the effect of some latent complaint, such as worms, which have a very different effect on different horses; for as horses of a lax habit of body, often lose their appetites in consequence of having worms, and are frequently griped and disordered in their bowels, so horses of strong rigid constitutions, that can bear the irritations of those animals in their intestines, are often voracious in their appetites, and are continually craving after food. Foul feeders differ, in some things, from those that have voracious appetites, for as these crave only after their common food, and can hardly *be ever* satisfied, those on the other hand, viz. foul feeders, will leave their hay to eat their litter, and seem to like it the better, when it is well sauced with their own dung and urine; and therefore they may be properly said to have a vitiated or depraved appetite. Though this does not always proceed from voracious appetite, yet the first is often productive of the latter, and may probably be occasioned by enlarging the capacity of the stomach and intestines to such a degree, that nothing will satisfy their cravings, but what has weight and solidity; for the same kind of horses will eat mould and wet clay, or any kind of foul nasty weeds out of the ditches, and in the stable will eat stinking musty hay, which the generality of horses will refuse. There are others of depraved appetites, that are neither foul nor voracious feeders, such as we often observe eat dry loam or mud out of the walls, which perhaps may arise from the irritation of some vitiated juices in their stomachs; and this also is frequently owing to worms, or perhaps, to a bad digestion, though without any natural imbecility in their constitutions; for though these horses have a longing after those extraneous things, yet their natural appetites at the same time seldom fail. As this is often merely owing to foul feeding, with the want of sufficient exercise, so we see them recover spontaneously, and lose that vitiated taste, when they come to ride a journey or go upon any other constant exercise.

The best method in all these cases of a vitiated or depraved appetite, is to begin with purging, and to dissolve chalk in their water and afterward to give them good exercise.—The same method may be complied with for those that feed voraciously. To these the stomach ball prescribed above, may be given as an experiment; for it is by no means unlikely that the malady arises from a want of sensibility in the organs of digestion, the restoring of which may also restore the natural instincts of the animal. If this course have any good effect, it will be known by his gathering more flesh under this management, and in proportion as his flesh increases his appetite will abate.

As to foul feeders, many of these begin with voraciousness, and when they come to be stinted, follow eating their litter to fill their stomachs, and in time take a great liking to it; and it is observable, that many of the horses that become broken winded have this propensity. Any one who has a foul feeding horse, should keep his stall as clean as possible, let no wet dirty litter lie under him, nor put his litter under the manger, but bestow it on some other horse, otherwise he will paw it out and feed upon it greedily. When the wet litter is taken away every morning, it may be the means to make the horse leave off what seems to be nothing more than a vicious habit.

---

## BLACK PEPPER.

Crawford, in his History of the Indian Archipelago, speaks of the Black Pepper plant in a way that induces us to think, that it might be cultivated in the United States with advantage. Some of our experimental farmers might do well to give it a trial:

The culture of pepper (says Crawford) is simple and certain. Of all products known to us under the name *colonial*, it is that which, in climates congenial to it, grows in the most indiffierent soils. Indigo, sugar cane, tobacco, and even cotton, and coffee, demand soils of high fertility, but pepper flourishes in comparatively indifferent ones, nay, indeed appears to attain the highest perfection in such. Those countries of the Archipelago, therefore we may remark, which are *not noted* for the production of the articles above enumerated, and for the rice, are those in which pepper comes to the greatest perfection, such as the south-west coast of Sumatra, the north coast of Borneo, and the eastern coast of the Malayan peninsula. Java, so famous for the fertility of its soil, produces the worst pepper of the Archipelago. The pepper vine, in its native country, is an inhabitant of the mountains, and in the Indian Archipelago, we find it cultivated only in dry upland soils, and never in the rich hot loams fitted for the growth of marsh rice.

Either in its wild or cultivated state, when the vine is suffered to creep on the ground, the fibres which, when it is trained, adhere to the prop, strike into the ground, and become roots; and in this situation it never bears fruit. To enable it to do so, it must be trained upon some tree or pole.

The land chosen for a pepper garden is a piece of forest land similar to that from which, after the felling and burning of the timber, a fugitive crop of mountain rice is taken. After the ground is broken, and prepared, the vegetating props are planted at regular distances, by cuttings usually two feet in length. The distance between each, in Penang, according to the improved practice of the Chinese, is seven feet and a half, but the native planters at Bencoolen, place them near as six feet. Six months after the planting of the vegetating props, the vines are planted. This is done by cuttings or slips of the vine from the horizontal shoots that run along the ground at the foot of the old vines. A singular operation, considered to be equivalent to transplanting, is invaribly performed on the young vines; this is called laying down, and consists in detaching the vine from its prop, and burying it at the foot of the prop, in a circular pit, eighteen inches in diameter, leaving no more above ground than the top, which is fixed to the prop. At Penang, this operation is performed in the eleventh or twelfth month, but at Bencoolen, not until the second or third year, on the first appearence of fructification. After this operation, which is always performed in the wet season, the plant shoots up along the prop with redoubled rapidity.

There is considerable variety in the period of the vines first bearing the fruit, and in the whole duration of its bearing. It usually, howsoever, yields fruit in the third year; it is in full bearing in the fifth,—and continues stationary for eight or nine years. After its fourteenth year, it begins to decline, and is not worth attending to after the twentieth, though it will not live to the thirtieth. In a rich soil, and a warm temperature, the progress of maturity and decay are most rapid. In poor soils, and colder climates, the contrary effects will take place.

In reaping the pepper harvest, the reaper nips off the *Amanta*, or clusters, when the first berries of each cluster appeared red, though the rest be still green. The clusters are thrown into baskets, where they remain for a day. They are then spread on mats and trodden with the feet, to detach the fruit from the stalks. After this the dust and broken grains are winnowed from the pepper. This with exsiccation in the heat of the sun, is the whole process of preparing this hardy product. White pepper, as is now well enough known, is black pepper blanched. The process of blanching consists in the simple immersion of the grains, choosing the ripest and best, for eight or ten days in water, a running stream if procurable, being preferred for this purpose.

---

*Discovery of Petrified Bones.*—The petrified bones of a large marine animal were found a few days ago, which appears to have laid on the surface of a freestone rock, covered by a thick stratum of yellowish coloured marble, in a quarry on the top of a hill near Bromyary. The workmen unfortunately broke them to pieces and carried the fragments upon the road, which are literally masses of stone, only distinguishable as the parts of an animal by their inferior form.—*Foreign pa.*

FOR THE PLOUGH BOY.

## A DESRIPTION OF THE HORSES IN INDIA.

(*Continued.*)

Horses of high cast, in India, commonly live to the age of thirty years; to fifteen, and even beyond twenty, they preserve their appearance, and perform their duty with vigour and spirit. The age of horses, in most parts of the globe, is considered by naturalists to be nearly the same, but as in very few instances they are in a perfect state of nature, it is difficult to fix its extent, calculated generally at forty. The difference of the periods, of existence between the horses of India, and those of England, rests, I conceive, on the purposes to which they are applied, the treatment of them, and in a great degree the goodness of their breed; in England, race horses and well bred hunters, live to and perform arduous tasks, at a great age; while the ordinary hack is in a state of debility at fifteen. In India, part of the year horses undergo little fatigue; whereas in England, with the exception of hunters, the climate procures no respite; on the contrary, the severity of it increases their labours. The most generous dispositions ever attend the highest cast Toorkys, and every branch of them, with the Tartar horse last described, is particularly valuable for their tempers. These horses, after standing months in the stable without being crossed, (very common in India in the hot season) may be mounted with due confidence of safety, returning to their exercises with the obedience of horses in constant practice; a qualification rarely found in those in England, even under the effects of castration; a superiority in docility, which is undoubtedly a property in the horses of India, unjustly accounted by nature vicious, by those who have not had an opportunity of experiencing the superior gentleness of their dispositions over those of English horses. I have known horses absolutely cured of bad tricks by standing a considerable time in the stable; they have forgotten them; and unless rode by a skilful hand, a man having a valuable horse may profit by a trial of this mode. Under the management of one conversant with breaking horses, constant exercise, properly regulated, is doubtless to be preferred; by inaction you can only hope to produce an absence of vice; from judicious training, the acquirement of good qualities and pleasant manners.

*Mojinniss, 5th.*—These horses are esteemed valuable, and are sold from 500 to 2,000 rupees. Mojinniss applied to the best of the breed, means the immediate offspring of the Tookooman and Tazee, and in general acception, a mixture. A purchaser ascertaining a horse to be the casts before described, can readily inform himself of the properties attributed to them; an advantage not equally attending the choice of a Mojinniss, whose qualities will most probably be in proportion, as he shall be near to the stem of his original progenitors; a horse many removes from them being, equally with the immediate offspring of the Tazee and Toorkooman, denominated a Mojinniss, a peculiar difficulty therefore attends the selection from a class so curiously partaking of the mixtures from which they may be sprung; many though preserving some lineage with those of high blood, retain no claim to any of their virtues, and will, on trial, be found to be less desirable than others of a price inferior to that generally demanded for a Mojinniss; but a Mojinniss, of high extraction, will prove scarcely inferior to the best casts; the natives compare him to an Irakee; of a temperate, flexible disposition, highly qualified for every purpose to which a horse can be applied, possessing animation, spirit, and beauty, requisite for shew and parade, with speed and perseverance equal to the severe exactions of militaryservice. Among this cast are to be found both light and heavy horses, according as they partake in conformation of the Tazee or Toorkooman; and they are distinguished by the terms of the Tazee or Toorky Mojinniss; a Mojinniss, for instance, produced by a Tazee upon a Tookooman mare, will, most probably, resemble the dam, more strongly in make than the sire, and vice versa. The cast of all colours, sizes and marks; and in proportion to the blood they inherit, will preserve their appearance and vigour.

*Jungle Tazee, 6th.*—The price of this horse is from 200 to 2,000 rupees. Tazee, literally signifies Arabian, and it is probable that in Persia, and Syria, it is only applied to horses, believed to have some mixture, more or less of the Arabian breed. It is certain that large studs of Arabian horses are kept in Persia by men of wealth and power, and that the Persian horses are greatly indebted to the Arabs for their high qualities; this is an opinion adopted by the best writers, (in particular Berringer) and confirmed by the most accurate information attainable in India; but whatever may have been the root of the term, it is so far from being opprobious in its acception by the natives of India, that it is applied by breeders, and merchants, to express a horse of the highest extraction, lively, active, vigorous, and with great speed and fire. in opposition to qualities found in the Toorky.—The Iran Tazee, is commonly described under the term Iran only, for the dealers, who have much intercourse with Europeans, sometimes use a warrantable finesse, in speaking of this cast, and give way to our prejudices by dropping the word Tazee, knowing the unfavourable construction built on it as implying a mean descent; consequently this horse is little known to us under that designation.—At the time of the descent of Timmer-shaw into Indoston, a considerable number of Persians, or Iran horses, it is recorded, were brought to the Penjab and secreted there, from which the present breed, distinguished by the term Jungle Tazee, is said to be descended; the dry soil and climate of the Penjab, being particularly favourable to the breeding of horses, the propagation of them became an object of emulation and profit. Those horses are of a high and daring spirit, rendering the greater skill and address requisite in the management and breaking of them, to the purposes of war or pleasure. They are of all heights, usually above fourteen hands and a half high; of all colours and marks, with such as are commonly objected to, white, four white legs, &c. In horses of bad cast, these and many others, are considered, and may be indications of bad qualities; in those of a high cast, they are not objected to, even by the natives, unless connected with some superstitious opinion, in which case, they are as often deemed favourable to their fortunes as otherwise, and which though certainly detracting from the beauty of the animal, consequently from his value, can have no influence on his powers or temper, nor do they warrant the rejection of a promising horse. The Jungle Tazee, preserves his power to a great age, and will be found steady in his temper, when brought to a knowledge of his duty, and habituated in the performance of it, by skill, firmness, and cool treatment, in the same person, (and practice and perseverance, will assuredly produce them,)these horses become highly valuable,rewarding to the fullest gratification the pains bestowed on them; but without command of temper, many more horses, will be confirmed in vicious or bad habits, than divested of them, particularly those of high mettle, whose spirits rise on undue severity, sometimes to implacability, and the most determined resistance, in opposition to that found in horses of low extractions, whose efforts are but the flash of the moment, yielding to severity and violence, and are subdued with little skill. Violence and harsh treatment in the best casts, will produce those bad qualities in temper ascribed to the worst, for which they are justly exceptionable; no horses are so determinedly vicious, as those rendered so by ill treatment. A man by force and a commanding seat, may harrass and restrain, for a while, the most determined horse, but in his turn, he will be watchful for an opportunity of gratifying his rage, and of abandoning himself to his resentment, in a moment fatal perhaps to his rider. A horse can never be said to be trained or broken, unless obedient in the full vigour of his spirits. Before the invitation of Nadvi shah, the Penjab, it is credibly asserted was famed for the production of a fine breed of horses, which circumstance at least confirms the general opinion, that the horses now produced there, partake of the Persian breed;—and a strong contrast in their tempers supported by many other discriminating marks, will illustrate the opinion founded on the fullest investigation of the subject, that the Tazee

is of a distinct breed from the genuine Tookooman, whose origin is beyond the reach of enquiry; but a comparative view of the constituents of the two horses, may better aid this opinion than the flimsiness of conjecture, while common experience will confirm the dissimilarity of their general properties.—The Tazee is. in general, higher than the Toorky, his withers lean and well raised, whereas the Toorky is usually rather inclined to be heavy in the forehand, and often times lower before than behind, with his shoulders less free, but is broader over the fillets than the Tazee, having also, for the proportion of his height, a deeper waist; a fullness at the sitting on of the head, which prevents his yielding duly to the hand, is a fault very common to Toorky's, and rarely found in the Tazee; but one of the strongest and least vatiable, is the appearance of the vertebre and the carriage of the tail: In the Toorky, the former appears to be sunk between the rising muscle on each side, and he is much more round and plump in the croop, than the Tazee; and the tail, though well carred, starts somewhat abruptly from the croop; whereas in the Tazee, the vertebre is distinctly seen rising above the muscle on each side, marking strongly the joints of it, carrying the tail clear of the croop, in resemblance to an English hunter. The Toorky's ears are large and lax, whereas those of a Tazee are remarkable for form and expression. In opposition to the placidity of temper in the Toorky, the organs of sensation in the Tazee, (are of them) renders the latter fretful and impatient, producing, not uncommonly, all the inconveniency and danger attendant on vice; without the most skilful management, this horse being vigorous and of quick action, often becomes useless to his owner, from the excess of a good quality; once deemed wicked, he continues to retain the reproach, and is treated with rigour, as if by nature ill tempered; until from resentment, and being constantly armed in expectation of ill-usage, he becomes, and remains really so, unless he fortunately falls into the hands of an owner, who by a knowledge of his true disposition, recovers his confidence, and reclaims his manner. For these reasons, Tarzees are in less request than Toorky's. Tazee and vice are received as synonymous, and those horses of daring and lofty tempers, are branded as vicious, tho' experience declares, when well managed, they will exhibit generosity equal to, or surpassing the Toorky, with an aptness of obedience he cannot boast, yet such is the imputation thrown on this superior class, an opinion aided by the degenerated race hereafter described, bearing the appellation of Tazee, whose qualities of temper, are not more foreign to the natural disposition of a well bred Tazee, than his form is a departure from the beautiful symmetry of that cast.

(TO BE CONTINUED.)

## AN ESSAY

*On the History and Cultivation of the* EUROPEAN OLIVE-TREE.—*By* AUGUSTUS L. HILLHOUSE, *Citizen of the United States, resident at Paris.—2d Edition, Oct.* 1820.

Quis divum aut hominum tam clari muneris auctor.
PASSERATII OLIVA.

(*Continued.*)

On the branches of the Olive, and on the trunk of the young tree, the bark is smooth and of an ashy hue. When the epidermis is removed, the cellular integument appears of a light green. On old trees the bark upon the trunk and upon the base of the principal limbs is brown, rough and deeply furrowed. In the spring and autumn, when the sap is in motion, the bark is easily detached from the body of the tree.

The wood is heavy, compact, fine-grained and brilliant. The alburnum is white and soft, and the perfect wood is hard, brittle, and of a reddish tinct, with the pith nearly effaced, as in the Box. It is employed by cabinet-makers to inlay the finer speces of wood which are contrasted with it in colour, and to form light, ornamental articles, such as dressing-cases, tobacco-boxes, etc. The wood of the roots, which is more agreeably marbled, is preferred. The Olive was classed by the ancients among the hard and durable species of wood, such as the Ebony, the Cedar, the Box and the Lotus. On account of its hardness it was used for the hinges of doors; and before metal became common in statuary, it was selected by the Greeks for the images of their Gods. Three statues of Minerva were preserved in the citadel of Athens, which exemplified the progress of this exquisit art: the first, made of olive wood. and of rude workmanship, was said to have fallen from heaven; the second, of bronze, was consecrated after the victory of Marathon; the third, of gold and ivory, was one of the miracles of the age of Pericles.*

From its resinous and oleaginous nature, the olive wood is eminently combustible, and burns as well before as after it is dried. The value of its fruit renders that property unimportant; but after the severe winter of 1709, which proved fatel to the Olives throughout Languedoc and Provence, the country was warmed for a considerable time with this precious wood.

The Olive accommodates itself to almost every variety of soil; but it shuns a redundancy of moisture, and prefers loose, calcarious, fertile land mingled with stones, such as the territory of Attica and of the south of France. The quality of its fruit is essentially affected by that of the soil: it succeeds in good loams which are capable of bearing corn, but on fat lands it yields oil of an inferior flavour, and becomes laden with a barren exuberance of leaves and branches. The temperature of the climate is a consideration of more importance than the nature of the soil, as all the varieties of the Olive dread the extreames both of heat and cold. Neither do they delight in very elevated situations, but rather in gentle declivities, with an exposure adapted to the climate, where the fresh breezes, playing among the branches, may contribute to the health of the tree, and to the fineness of the fruit.

Notwithstanding the delicacy of its complexion, the Olive is extreamly tenacious of life. When the trunk has perished by frost or by fire, it sprouts anew; and we are assured that if a bit of the bark, with a thin layer of wood, is buried in the earth, it becomes a perfect plant.

In this respect the Olive is the polypus of vegetables, It is multiplied by all the modes that are in use for the propagation of trees; by sowing the seed, by layers, by slips, by cuttings of the root, and by sprouts separated from the trunk or from the roots of the parent stock. The most obvious method, that of forming nurseries from the seed, is generally censured in books, and rejected in practice; the difficulty of obtaining the young plants, and the length of time which must elapse before they begin to reward the labour of the husbandman, have discouraged its adoption. But if these objections could be obviated, it is doubtless the most eligible practice: as the plants thus reared begin a new life, they are more vigorous and of longer duration than off-setts from an old tree; they form also a perpendicular root, which penetrates deeply, and secures them from the danger of suffering by drought.

In most of the experiments that have been made of this method, the fruit has been sown entire; and this is even enjoined, as a necessary precaution. But, however it may seem to be indicated by nature, such is not her own process. The stones which produce the wild Olives are deposited by animals that digest the pulp, or by birds that carry away the fruit in their beaks, devour the pulp, and leave the stones to take their chance with the elements. The principles of vegetable physiology, also, support the conclusions derived from these observations:* the pulp not only invites the depredations of animals such as field-mice, pies, etc.; but this oily envelope, by preserving the shell from moisture, prevents its decaying in season for the germination of the kernel, which, in the meantime, becomes rancid and loses its fecundity.

Ripe fruit of the finest varieties is selected, (that of the *Gros Ribies* is the best,) and the stones, after being separated from the pulp, are cleansed in an alkaline solution. A sheltered situation is chosen, where the earth is thoroughly loosened to the depth of three feet, and enriched with the warmest manures. In the month of March the stones are sown, at a small distance apart, in trenches two or

* *See* Barthelemy.

* *See* De Saussure's Chemical Researches on Vegetation.

three inches deep, and covered with earth.—The soil should be kept free from herbage, and occasionally watered during the summer. The young plants appear in October, and continue to vegetate through the winter. By the following spring, the most thriving among them will have attained the height of thirty inches. The feebler stocks should now be eradicated. With proper attention, and in a favourable soil, the remainder will be four or five feet high, and six or seven lines in diameter, in the course of the third spring, with a perpendicular root of thirty inches. This is the season for transplanting them. Great care should be bestowed upon the preparation of the ground, and the young plants should be placed three feet apart. After two years they will be sufficiently advanced to be grafted;—and at the end of five years they may be transplanted to the olive-yard.

To accelerate the germination, the stones may be kept in fine mould during the summer and autumn, and sown in the begining of January. They soon begin to vegetate, and before the following winter the young stocks acquire strength enough to support its rigours, while the tender plant that comes up in October, is in danger of suffering by the lightest hoar-frost. Perhaps some advantage would be found in reducing the thickness of the shell before it is committed to the ground, in order to expose the germ more speedily to the influence of those agents which are necessary to its expansion.

Every mode of grafting is successfully practised on the Olive: the most common, and the most proper for young stocks, is that of inoculation. The operation should be performed in May, while the juices are in active circulation. Different opinions prevail respecting the insertion of the graft above or below the surface of the ground: grafting below the surface is attended with this advantage, that, when the trunk is destroyed, a generous progeny springs from its base.

A few stocks should be left to form new varieties. Fruit trees and flowers lose in reproduction, the properties which they had acquired by culture, and tend anew to the state of nature; but, in a great number of plants reared from the seed, a few are found that equal or excel the parent. Florists consider themselves as fortunate if, among a thousand Hyacinths or Tulips, they obtain three or four deserving of notice.

The young Olives begin to yield fruit the tenth or twelfth year, and are fully productive about the twenty-fifth or thirtieth: thus Hesiod's observation, that no man gathers fruit from an Olive of his own planting, must be admitted with the abatements of poetry.

[TO BE CONTINUED.]

---

*From the American Farmer.*

## MANGEL-WURTZEL,

*Its Culture, Excellence, and Great Produce.*

Dear Sir,—As you have expressed a very favourable opinion of Mangel-Wurtzel in No. 5 of your present volume, I have thought you might be pleased with the account of an experiment, in a small way, made with great care and attention, under my particular observation which goes to confirm its excellence above any other root I have ever cultivated.

The ground selected was a rich black loam upon a clay bottom, containing thirty-two square rods, or one-fifth of an acre. It was manured with four loads of rotten hog dung of forty cubic feet per load. After being brought into fine tilth, and the surface raked smooth, it was out in eight beds, four rods long, and one rod wide; and immediately, 4th May, sowed in rows one foot apart. June 2d, was weeded, and the plants thinned, so as to stand, as nearly as possible, three inches distance in the rows. June 29th, began to thin by taking up every other plant, leaving them at six inches apart, and gathered eighty-eight bushels, (crowded&heaped) the roots being about the srze of one's finger—these, with their tops, were boiled for my hogs, and devoured voraciously. July 4th, commenced thinning again, so as to leave the plants one foot apart, produce one hundred and four bushels. Their growth now was very rapid, so that the 20th July, began the last thinning which was done, by entirely taken up every other row—thus leaving the crop standing for winter use in rows two feet apart, and the plants one foot distance in the rows. The roots were at this time generally as large as one's wrist, and the tops very luxuriant. The produce one hundred and twenty-six bushels. In autmn the tops were cutu off close, as we wanted them for use, and measured sixty-three bushels—and the roots pulled producing one hundred and fifty-two bushels, weighing sixty-two pounds each.

*Recapitulation.*

| | | | |
|---|---|---|---|
| 1st thinning tops & roots | 88 bus. | crowded and | (heaped. |
| 2d. do. | do. | 104 do. | do. |
| 3d. do. | do. | 126 do. | do. |
| Roots dug in Autumn, | 152 do. | w't. 62 p. | bush. |
| Tops, | 63 do. | | |
| TOTAL, | 533 bushels upon thirty-two square rods of ground, or at the rate of 2665 bushels per acre. | | |

This result is extremely gratifying, as I have not only a crop of roots at the rate of 760 bushels per acre, for winter consumption, but was also accommodated for nearly six weeks with a summer supply of most excellant food for my animals, at the rate of 1905 bushels per acre.

Should you think it useful I will detail another experiment made on 32 rods of land adjoining the above, which will show the advantage of cultivating Mangle-Wurtzel, when followed by cabbages the same season, in a still stranger point of view.

*A Massachusetts Farmer.*

DECEMBER 1st, 1821.

THE PLOUGH BOY.

ALBANY: SATURDAY, JANUARY 26, 1822.

FOR THE PLOUGH BOY.

## CONCERNING FRUIT TREES.

Several communications have appeared in the Plough Boy, as well as publications at Baltimore, recommending the use of Tanner's bark, round the trunk and root of trees, as a preservative against insects. In 1810, I placed round the trunks and roots of about 1000 trees, of different kinds, about two bushels tan, to each three, as an experiment: I found the trees to thrive in a very luxuriant manner for some time, but when the tan began to decay, I found several of my trees destroyed; which was caused by a white grub, with a red head, (known by the name of wood worm.) I then examined an apple orchard of about 200 trees, where no tan had been used, and found the trees in a much better state; very few of which were infected with the grub above mentioned.

I have made trial of about 20 different kinds of experiments, generally recommended, to save my fruit from distruction, but have found all of them to be only a temporary relief from infection. I discovered that to take about two bushels of earth six inches below the surface, and throw it round the trunk and root of each tree, after clearing the old soil from the trunk down to the root, to answer as good a purpose as tan; which earth should be removed once every two years, and new earth applied as before mentioned.

I have also found, that to have a heap of stones placed on the south side of every peach tree, proved as beneficial as either earth or tan.

The only benefit derived from tan is, that the frost remaining longer next to the trees, in the spring, than those which were not tanned, and when the weather became more settled they were more sure of a crop, and the buds are not injured by frost and thaw.

I have experienced the cheaf destruction among peach trees is as often done in the latter part of August as in any part of the season: upon examination I have perceived the end of the peach twigs to have been stung by some insect, then to turn brown and spindle; the year following the leaves become curled and sickly: by watching peach trees at that time of the year, it may be seen that a number of black Ants are to be found at the end of the twigs, which I suppose is the principal evil to which peach trees are subject.

In the spring about three or four days after the frost is out of the ground, you may find some of the white grub at the root of peach trees, commonly secreted under the gum;—which may be remedied in the following manner; by clearing the earth about five or six inches below the surface, scrape the gum off, and apply dry ashes to the wound.

The best remedy that I have been able to

discover for plum trees, is to place a quantity of oyster or clam shells round the roots, and every spring as soon as the frost is out of the ground, to pour about two quarts of water at the root, which water is taken from ten gallons prepared in the following manner, in which one ounce of corrosive sublimate of mercury had been dissolved, this water is also good for peach trees if applied at the roots during the summer.

I think it necessary to caution those who may feel disposed to make use of this water, that it is possessed of poisonous qualities, and therefore should not be put in any wooden vessel, except it is kept expressly for that purpose.

P. L.

---

FOR THE PLOUGH BOY.

*To prevent Ice from Adhearing to Water-Wheels.*

I was formerly annoyed very much by Ice adhering to my Water Wheels, and admitted smoke and heat, but to no purpose. About five years ago I had an iron kettle, which contained about fifty gallons, masoned in the form of a Brewer's kettle, on the top of which was a copper cover of a conical form with a pipe of about three feet long, constructed so as to admit the steam on the Water Wheel which had been previously enclosed in a box: this simple mode has kept the Wheels perfectly free from Ice during the severest winters and consumes only four cords of wood in the season, the expense of which is not more than half as great as the injury the Wheels sustain by breaking the ice off in the usual manner, exclusive of the loss of time.

P. L.

---

## Medical Botany.

Selected for the Plough Boy, by the Editor.

No. IX.

TORMENTILLA ERECTA. COMMON TORMENTIL, OR UPRIGHT SEPTFOIL.

The root is perennial, thick, roundish, irregular conical, knobbed, and covered with a bark of a dark brown colour; the internal substance is dense, and has a reddish tinge; it sends forth many stems, which grow about a span high; they are round, slender, firm, somewhat hairy, more or less erect, and branched towards the top. The leaves upon the stalk are generally divided into seven, but those upon branches are commonly five; of these, three are larger than the others;—they are all of an eliptical shape, deeply serrated, villous, and the upper surface is of a deeper green colour than the under. The flowers stand singly upon long peduncles, which spring from the alæ of the leaves, each flower consisting of four small, roundish, emarginated, yellow petals; the calyx is cut into eight unequal segments; the pistilla are commonly eight, and contain as many seeds.—This plant is common in dry pastures, and usually flowers in June. It is distinguished from the Tormentilla reptans, by its sessile leaves, its smaller petals, and its more erect stem.

The root is the only part of the plant which is used medicinally; it has a strong styptic taste, but imparts no peculiar sapid flavour.—As a proof of its powerful astringency, it has been substituted for oak bark in the tanning of skins for leather. This root has been long held in great estimation by physcians, as a very useful astringent; and as the resin it contains is very inconsiderable, it seems more particularly adapted to those cases where the heating and stimulating medicines of this class are less proper; as phthifical diarrhœas, diarrhœa cruenta, &c. Dr. Cullen thinks "it has been justly commended for every virtue that is competent to astringents," and says, "I myself have had several instances of its virtues in this respect; and particularly I have found it, both by itself and as joined with gentian, cure intermittent fevers; but it must be given in substance, and in large quantities."

This root may be given in powder from half a dram to one dram or more for a dose but it is more generally given in decoction, and the following form is recommended by Lewis: An ounce and a half of the powdered root is directed to be boiled in three pints of water to a quart, adding, towards the end of the boiling, a dram of cinnamon: of the strained liquor, sweetned with an ounce of any agreeable syrup, two ounces or more may be taken four or five times a day.

Tormentil is ordered in the pulvis e creta compositus of the London Pharmacopœia.

---

*Observations on the Weather, by the Rev. W. Jones.*

*Clouds.*—Against much rain, the clouds grow bigger, and increase very fast, especially before thunder. When the clouds are formed like fleeces, but dense in the middle, and bright towards the edges with the sky bright, they are signs of a frost, with hail, snow or rain. If clouds breed high in air, in thin white trains, like locks of wool, they portend wind and probably rain. When a general cloudiness covers the sky, and small black fragments of clouds fly underneath, they are a sure sign of rain, and probably it will be lasting. Two currents of clouds always portend rain, and, in summer, thunder.

*Dew.*—If the dew lies plentifully on the grass after a fair day, it is a sign of another.—If not, and there is no wind, rain must follow. A red evening portends fine weather, but if it spread too far upwards from the horizon, in the evening, and especially morning, it foretels wind or rain, or both. When the sky, in rainy weather, is tinged with sea green, the rain will increase; if with deep blue, it will be showery.

*Heavenly Bodies.*—Haziness in the air which fades the sun's light, and makes the orb appear whitish, or ill-defined; or at night, if the moon or stars grow dim, and a ring encircles the former, rain will follow. If the sun's rays appear like Moses' horns, if white at setting, or shorn at its rays, or goes down into a bank of clouds in the horizon, bad weather is to expected. If the moon looks pale and dim, we expect rain; if red, wind; and if, of her natural colour, with a clear sky, fair weather.—If the moon is rainy throughout, it will clear at the change, and perhaps the rain return a few days after. If fair throughout, and rain at the change, the fair weather will probably return on the fourth or fifth day.

*Animals.*—Before rain, swallows fly low; dogs grow sleepy, and eat grass: water-fowl dive much; fish will not bite; flies are more troublesome; toads crawl about, moles, ants, bees, and many insects, are very busy; birds fly low for insects; swine, sheep and cattle are uneasy, and even the human body.

*English Proverbs on the Weather.*

If red the sun begings his race,
Expect that rain will fall a pace.

The evening red, the morning grey,
Are sure signs of a fair day.

If woolly fleeces spread the heavenly way,
No rain be sure, disturbs the summer's day.

In the waning of the moon,
A cloudy morn—fair afternoon.

When clouds appear like rocks and towers,
The earth's refreshed by frequent showers.

---

## Weekly Summary.

A machine for cutting boards, and otherwise rendering them fit for many useful purposes, has been for some time in operation at Eldridge, in this state. The whole operation is performed by water; the wood is sawed to the proper lenth, cut into boards, then planed, morticed, moulding struck, &c. all by the same machinery.

Mr. William Britain, who had the charge of the prisoners from Auburn at work on the canal, died lately, and it is supposed he was poisoned by the prisoners.

An ingenious individual of Baltimore has invented a new machine for cutting straw, by which a boy can cut a bushel in a minute. Its movements are very simple, and it occupies very little space: it is calculated to cut corn stuffs, and husks as well as straw, and is valued at $50.

*Hayti.*—Since the death of Christophe, the whole territory which formerly composed his kingdom, and the republic established by Petion, has been formed into one government, upon the model of that of the federal government of the United States, viz: a president, senate, and house of representatives. Port-au-Prince is the capital.

The legislature of Ohio has passed a law for the reduction of the pay of members to $2 per day. A resolution to repeal the law laying a tax on the Branches of the United States' Bank, had been rejected in the Senate, 27 to 6. A resolution to repeal the law withholding from said branches the aid and protection of that state, was under consideration in the same body.

## Foreign Agricultural, Scientific and Literary Notices.

*Painting and Sculpture.*——Considerable progress has of late been made in Painting and Sculpture in Stockholm. Falcrantz, who has acquired the honourable distinction of the Swedish Claude, has just completed two worn-derful landscapes, executed upon a very large scale. They are painted for the king, who had given the artist a commission for them.—Another painter, named Sandberg, has also recently completed a very capital performance, which is allowed to be one of the best productions of art that the north has ever produced. Fogleburgh is employed in modelling two immense colossal lions, intended to be placed beside the pedestal of the statue of Charles the Thirteenth; which consists of a stupendous block of granite. This monument is situated in what is called the King's Garden at Stockholm. Bystrom, another Swedish Sculptor, is actually engaged at Rome in the execution of statues of three of the Charlesses :—viz. Charles X, XI, and XII. The Academy of Fine Arts have announced a public exhibition which it is expected will contain works that will not fail to raise the character of Sweeden to a rank in art which it has not hitherto attained.

A museum, or gallery of paintings has been formed at Madrid by the government, who open it to the public one day in the week.—It consists solely of the works of the most eminent Spanish masters, from the commencement of the sixteenth century down to the present period. The number of pictures is already 332; but the collection will be still further augmented by the addition of the productions of the Spanish school, now scattered through the various palaces and royal seats; and the spoils from the suppressed religious houses, of the first class, will be far from inconsiderable. Senor Ensevi, miniature painter to his majesty—an artist thoroughly well acquainted with the style of each school and master, is appointed director or keeper of the museum.

*Ancient Dwellings.*—A Copenhagen Journal, entitled Skilderien, (Pictures,) gives the following examples of the vicissitudes experienced by ancient dwellings, and of the singular contrasts which may present between their former and their present occupants. A mansion in Copenhagen, formerly the residence of a Danish minister, is at present inhabited by a saddler: that once belonging to a nobleman of high rank is tenanted by a carter: while the building, which was once the proud palace of the mighty Sigbritt and Dyvecke, has been converted into a shop.—But similar changes are experienced in other countries: thus it is not many years ago since a chairman occupied, in the Old Town of Edinburgh, the house formerly belonging to Lord Drummond. A coachmaker, that of the Duke of Douglas; and a stick-maker, the Marquis of Argyle's. A sheriff's officer tenanted the room that once possessed Cromwell as its inmate; while in Calmar, the hall in which the Union was concluded, is now used as a kind of prison for criminals.

*Statistical.*——In Denmark, according to Professor Olusen's Statistical view, there are 1,630,000 inhabitants on 964 square miles; a population that he affirms might be extended to 2,200,000, or 2,800,000. Among these 1,630,000, there are5 6,000 paupers, or every twenty-fourth person; and Copenhagen and Altona alone contain 12,000 of these latter.

*Russian Literature.*—Many German and Russian literati, residing at Dorpath have recently formed a reading society, which circulates a number of works in both languages.—This place has for many years past been the residence of the celebrated Russian poet Schukowsky. He is well acquainted with the literature of France; likewise with that of Germany and England, to which he is particularly attached. His lyrical productions from an epoch in Russian poetry. Among the finest of his compositions may be reckoned his 'Epistle to the Emperor Alexander.'——'The Bard among the warriors of Russia,'—and, 'The Bard on the Ruins of the Kremlin.' Among his translations from foreign authors are many poetical pieces from Schiller and Gothe. Lobanow is a nother Russian poet, who is a great favourite with his countrymen: one of his most esteemed productions is an "Elegy at the Grave of Prince Kutusoy Smolensky."

The dramatic literature of Russia, has of late been enriched by several valuable translations: among these the most eminent are Lobanow's Iphigenia,——Tancred, by Gneditsch,—Esther, by Katenin,—and, The Misanthrope, by Kochoschin. A translation has likewise appeared of Delisle's beautiful poem of The Gardens. It is from the pen of Alexander Woikoff, Professor of the Russian Language and Literature at the University of Dorpath: this writer, who is eminently distinguished for his intimate acquaintance with the classics, is now employed upon a translation of the Georgics of Virgil. Woikoff has, moreover, attained no little celebrity from the elegance of his muscial compositions: nor is he less estimable for the amenity of his manners, than admirable for the brilliancy of his attainments.

*Meridian Distances.*—Captain Mudge, of the Royal Engineers (son of the late scientific Gen. Mudge,) accompanied by M. Mathieu, Member of the Royal institute at Paris, proceeded to Fairlight Down, Hastings, and superintended the fining of a vertical reflector, constructed by M. Mathieu, on the same spot selected by General Roy thirty years since, to enable observations to be taken from the coast of France, near Calais, for the re-measuring the distance between the meridian of the Observatories of Greenwich and Paris. The light from the reflector is visible at the distance of 90 miles. It consists of four circular wicks, the largest of which is ten feet in circumference. It consumes two quarts of oil in the hour. It is lighted an hour before sunrise and sunset, and is kept burning for two hours.

*New Work.*—Mr. Goerres, whose political works have created so strong a sensation, is now at Arau, in Switzerland, occupied on a new publication, entitled "Europe and the Revolution."

### METEOROLOGICAL JOURNAL,

*For the Month of December, 1821,*

KEPT AT THE CITY ACADEMY IN ALBANY.

| days. | Thermom'r 7 a m | Thermom'r 2 p m | Thermom'r 9 p m | Barometer. 7, 8 a m | Barometer. 2 p m | Barometer. 9 p m | Winds morn'g | Winds afte n. | Weather morn'g | Weather aftern. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 25 | 32 | 28 | 29.92 | 29.92 | 29.83 | NW | SE | Cld | Cldy |
| 2 | 30 | 37 | 34 | 29.60 | 29.43 | 29 28 | SE | SE | do | do |
| 3 | 38 | 40 | 38 | 29.32 | 29 40 | 29.40 | sw | sw | Cl. | do |
| 4 | 35 | 40 | 37 | 29 40 | 29.39 | 29.39 | S | S | Cldy | do |
| 5 | 34 | 37 | 36 | 29 32 | 29.22 | 29.08 | sw | S | do | do |
| 6 | 30 | 34 | 32 | 29 20 | 29 27 | 29.27 | W | W | Cl. | Clr. |
| 7 | 33 | 39 | 29 | 28.38 | 29.38 | 29 38 | SE | S | do | do |
| 8 | 30 | 36 | 35 | 29.38 | 29.25 | 29.17 | S | S | Cldy | Cldy |
| 9 | 32 | 43 | 34 | 29.30 | 28.40 | 29 50 | W | | Clr. | Clr. |
| 10 | 27 | 36 | 31 | 29.61 | 29 67 | 29.58 | NW | NW | Cld | Cldy |
| 11 | 31 | 38 | 31 | 29.26 | 29 30 | 29 49 | sw | N | do | do |
| 12 | 23 | 37 | 27 | 29.61 | 29 64 | 29.62 | W | | Clr. | Clr. |
| 13 | 24 | 30 | 33 | 29 52 | 29.17 | 28.63 | NW | NE | Cldy | Cldy |
| 14 | 25 | 33 | 22 | 28.97 | 29.21 | 29.39 | W | sw | do | Clr. |
| 15 | 15 | 25 | 11 | 28.85 | 29.01 | 29 02 | S | S | Clr. | do |
| 16 | 8 | 24 | 20 | 30 4 | 30.27 | 29.9 | S | S | do | do |
| 17 | 20 | 27 | 27 | 29.90 | 29.89 | 29 81 | S | S | Cl | Cldy |
| 18 | 32 | 37 | 23 | 29.78 | 29 8 | 29 72 | NE | NW | do | do |
| 19 | 16 | 32 | 25 | 29.62 | 29 54 | 29.52 | NW | N | Cl. | Clr. |
| 20 | 16 | 31 | 27 | 29 68 | 29.60 | 29 65 | NW | NW | do | do |
| 21 | 26 | 36 | 32 | 29.55 | 29.37 | 29.42 | SE | SE | Cldy | Cldy |
| 22 | 17 | 32 | 20 | 29.68 | 29 81 | 29 87 | N | N | Clr. | Clr. |
| 23 | 14 | 32 | 18 | 29.95 | 30.01 | 30 10 | d | do | do | do |
| 24 | 12 | 26 | 16 | 29 93 | 29 80 | 29.83 | d | do | do | do |
| 25 | 13 | 25 | 12 | 30.0 | 30.06 | 30 12 | d | d | do | do |
| 26 | 6 | 20 | 24 | 29.83 | 29 60 | 29.32 | d | d | do | do |
| 27 | 10 | 27 | 20 | 29.54 | 29 63 | 29 51 | S | S | do | do |
| 28 | 14 | 29 | 18 | 29.40 | 29.42 | 29.53 | N | N | do | do |
| 29 | 6 | 16 | -2 | 30.17 | 3.02 | 30.35 | NW | N | do | do |
| 30 | 0 | 13 | 17 | 30.03 | 29.98 | 29.75 | NW | N | do | do |
| 31 | 18 | 27 | 15 | 29 83 | 29.91 | 30.02 | sw | sw | do | do |

*Observations.*

1st, snow at evening.
5th, slight snow at evening.
8th, slight snow a m.
11th, snow a m.
13th, snow all day, and rain at night.
18th, snow a m.
21st, mist all day.

☞ COMMUNICATIONS and SUBSCRIPTIONS for this paper, received at the Post-Office. All letters from abroad, directed to the EDITOR, Albany, will be duly attended to. Each volume comprises twelve months, or fifty-two numbers: the numbers are issued weekly, on Saturday, and the volume commences the first Saturday in June.

TERMS.—THREE DOLLARS PER ANNUM, PAYABLE IN ADVANCE.